

Prompt and favorable examination on the merit is respectfully requested.

Respectfully submitted,



James A. Oliff  
Registration No. 27,075

Eric D. Morehouse  
Registration No. 38,565

JAO:EDM/gam

Attachments:

Substitute Abstract  
Appendix  
Substitute Specification  
Marked-up copy of specification

Date: May 20, 2002

**OLIFF & BERRIDGE, PLC**  
**P.O. Box 19928**  
**Alexandria, Virginia 22320**  
**Telephone: (703) 836-6400**

<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
--

## APPENDIX

## Changes to Abstract:

The following is a marked-up version of the amended Abstract.

## ABSTRACT

The present invention provides a method for forming a thin film using a CVD process in which a large-scale vacuum exhaust unit or neutralization unit is not required, and a patterning step after the formation of the film is not required.

— ~~A pattern 30a composed~~ formed of a monolayer is formed using (heptadecafluoro-1,1,2,2-tetrahydro)decyl-triethoxysilane on a surface ~~71 for to forming~~ a thin film of a second glass substrate ~~7~~. Droplets ~~5 composed~~ formed of trimethylaluminum are placed on a plurality of parts of an upper surface ~~81 of a first substrate 8~~. The droplets ~~5 are~~ placed at the positions corresponding to openings ~~31 of the monolayer pattern 30a~~. Both substrates ~~7 and 8~~ are placed in parallel with a predetermined distance therebetween, and the openings ~~31 and~~ the droplets ~~5 are~~ aligned with each other. While supplying nitrogen gas between the substrates ~~7 and 8~~, the second substrate ~~7 is~~ heated to 300°C and retained for 5 minutes. Thereby, the droplets ~~5 are~~ vaporized and the gas is fed into the openings ~~31~~. Aluminum resulting from decomposition by heat is deposited in these parts and aluminum thin films ~~50 are~~ formed.

## Changes to Specification:

A Substitute Specification is attached in accordance with 37 C.F.R. 1.125(b)(2).

## Changes to Claims:

The following are marked-up versions of the amended claims:

~~(1)~~ 1. (Amended) A method for forming a thin film by chemical vapor deposition, comprising the steps of:

\_\_\_\_\_ placing a liquid containing a raw material for the thin film ~~on~~ over one of a  
part ~~or~~ and a plurality of parts of a substrate; and

\_\_\_\_\_ vaporizing the raw material for the thin film from the liquid so as to be fed to  
one of a part or and a plurality of parts of a surface ~~for to forming~~ the thin film so as to form  
the thin film with a predetermined pattern ~~on~~ over the surface ~~for to forming~~ the thin film.

~~-(2)~~ 2. (Amended) ~~A~~ The method for forming a thin film according to Claim 1,  
~~wherein further including using a surface of the substrate is used as a surface for to placing~~  
the liquid, and forming the thin film ~~is formed~~ in a region other than the region in which the  
liquid is placed on the surface ~~for to placing~~ the liquid.

~~-(3)~~ 3. (Amended) ~~A~~ The method for forming a thin film according to Claim 1,  
~~wherein further including placing a first substrate for to placing the liquid and a second~~  
substrate ~~for to forming form~~ the thin film ~~are placed~~ so that the surface ~~for to placing~~ the  
liquid of the first substrate faces the surface ~~for to forming~~ the thin film of the second  
substrate, and vaporizing the raw material for the thin film ~~is vaporized~~ from the liquid placed  
on one of a part or and a plurality of parts of the first substrate so as to be fed to the surface  
~~for to forming~~ the thin film of the second substrate.

~~-(4)~~ 4. (Amended) ~~A~~ The method for forming a thin film according to Claim 3,  
~~wherein further including heating the surface for to forming the thin film of the second~~  
substrate ~~is heated~~ to a temperature at which a vaporized substance of the raw material for the  
thin film is decomposable, and heating the first substrate ~~is heated~~ to a temperature at which  
the raw material for the thin film is vaporized from the liquid by the heat radiated from the  
second substrate.

5. (Twice Amended) ~~A~~ The method for forming a thin film according to  
Claim 1, further ~~comprising~~ including, before the step of placing the liquid, ~~the step of~~

forming an active region and an inactive region for the chemical vapor deposition in the surface ~~for to forming~~ the thin film so that the thin film is selectively deposited.

~~-(6)~~ 6. (Amended) A ~~The~~ method for forming a thin film according to Claim 5, ~~wherein further including performing~~ the formation of the active region and the inactive region for the chemical vapor deposition ~~is performed~~ by forming a self-assembled film on the surface ~~for to forming~~ the thin film having hydroxyl groups using a silane derivative represented by ~~the~~ a general formula  $\text{RSiX}_3$  (wherein R is a fluoroalkyl group in which terminal hydrogen of the alkyl group is replaced with fluorine, and X is an alkoxy group or halogen group); and performing ultraviolet irradiation on the self-assembled film through a photomask or performing electron beam irradiation on necessary parts of the self-assembled film so that the self-assembled film in a region ~~for to forming~~ the active region for the chemical vapor deposition is removed.

7. (Twice Amended) A ~~The~~ method for forming a thin film according to Claim 1, ~~wherein further including performing~~ the step of vaporizing the raw material for the thin film ~~is performed~~ while supplying inert gas, hydrogen gas, or a mixture of inert gas and hydrogen gas parallel to the surface ~~for to placeing~~ the liquid of the substrate.

8. (Twice Amended) A ~~The~~ method for forming a thin film according to Claim 1, ~~wherein further including performing~~ the step of placing the liquid ~~is performed~~ by an ink-jet method.

~~-(9)~~ 9. (Amended) An electronic apparatus, comprising:

~~a~~ the thin film formed by the ~~above~~ method according to claim 1, the thin film being used as an electrode.